

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method comprising:

generating source code from a simulatable block diagram model using a code compiler,
the simulatable block diagram model represented in a source model language, wherein the
generated source code includes one or more comments that include a block path identifying a
section of the source model language that corresponds to ~~identify a reference to~~ an element in
the block diagram model ~~are included in the generated source code;~~

generating a code generation report from the generated source code using a report
compiler, the generating of the code generation report comprising:

parsing, using the report compiler, the one or more comments in the generated
source code;

identifying, using the report compiler, the block path in the one or more
comments, and

converting, using the report compiler, the generated source code into the code
generation report by replacing the ~~reference to the element~~ block path with a hypertext
link that refers to the element of the block diagram model ~~identified by the reference~~ that
corresponds to the section of the source model language identified by the block path, the
hypertext link providing a hyperlink from the code generation report to the ~~source model~~
~~language representing the element in the~~ block diagram model; and
displaying the code generation report to a user.

2. (Previously Presented) The method of claim 1 further comprising:

receiving input from a user representing a selection of the at least one hypertext link; and

displaying to the user at least a portion of the block diagram model including the element
of the model associated with the hypertext link.

3. (Original) The method of claim 2, wherein displaying to the user at least a portion of the
block diagram model comprises displaying the associated element in a highlighted fashion.

4. (Canceled).

5. (Previously Presented) The method of claim 1, wherein the parsing replaces a variable reference in the generated code with a hypertext link to an associated element in the block diagram model.
6. (Original) The method of claim 1 wherein the hypertext link is Standard Generalized Markup Language (SGML).
7. (Original) The method of claim 1 wherein the hypertext link is Hypertext Markup Language (HTML).
8. (Previously Presented) The method of claim 5 wherein the hypertext link is Extensible Markup Language (XML).
9. (Previously Presented) The method of claim 1 wherein the at least one comment listing a reference to a block comprises a character string identifying a path to a file providing information relating to a section of the block.
10. (Currently Amended) A system comprising:
 - means for generating source code from a simulatable block diagram model represented in a source model language, wherein the generated source code ~~including~~ includes at least one comment listing that includes a block path, the block path identifying a section of the source model language that corresponds to a reference to a block in the block diagram model;
 - means for generating a code generation report from the generated source code, the generating of the code generation report parsing the at least one comment in the generated source code to identify the block path in the at least one comment and replacing the at least one comment with at least one hypertext link that refers to an ~~corresponding~~ element of the block diagram model that corresponds to the section of the source model language identified by the block path, the hypertext link providing a hyperlink from the code generation report to the source model language representing the element of the block diagram model; and
 - an output device for displaying the code generation report to a user.
11. (Previously Presented) The system of claim 10 further comprising:

means for receiving input from a user representing a selection of the hypertext link; and
means for displaying to the user at least a portion of the block diagram model including the element of the model associated with the hypertext link.

12. (Previously Presented) The system of claim 11, wherein the means for displaying to the user at least a portion of the block diagram model comprises displaying the associated element in a highlighted fashion.

13. (Canceled)

14. (Previously Presented) The system of claim 10, wherein the parsing replaces a variable reference in the generated code with a hypertext link to an associated element in the block diagram model .

15. (Previously Presented) The system of claim 10 wherein the hypertext link is Standard Generalized Markup Language (SGML).

16. (Previously Presented) The system of claim 10 wherein the hypertext link is Hypertext Markup Language (HTML).

17. (Previously Presented) The system of claim 16 wherein the hypertext link is Extensible Markup Language (XML).

18. (Previously Presented) The system of claim 10 wherein the at least one comment listing a reference to a block comprises a character string identifying a path to a file providing information relating to a section of the block.

19. (Currently Amended) A computer program product residing on a computer readable medium having instructions stored thereon which, when executed by ~~the~~a processor, cause the processor to:

generate source code from a simulatable block diagram model represented in a source model language, the generated source code including at least one comment that includes a block

path, the block path identifying a section of the source model language that corresponds to listing a reference to a block in the block diagram model;

generate a code generation report from the generated source code, the generating of the code generation report parsing the at least one comment in the generated source code to identify the block path in the at least one comment and converting the generated source code into the code generation report by and replacing the at least one comment with at least one hypertext link that refers to an corresponding element of the block diagram model corresponding to the section of the source model language identified by the block path, the hypertext link providing a hyperlink from the code generation report to the source model language representing element of the block diagram model; and

display the code generation report to a user.

20. (Original) The computer program product of claim 19 wherein the computer readable medium is a random access memory (RAM).

21. (Original) The computer program product of claim 19 wherein the computer readable medium is read only memory (ROM).

22. (Original) The computer program product of claim 19 wherein the computer readable medium is hard disk drive.

23. (Currently Amended) A computing system comprising:

a processor and

a memory,

wherein the processor and memory are configured to:

generate source code from a simulatable block diagram model represented in a source model language, the generated source code including at least one comment including a block path that identifies a section of the source model language that corresponds to listing a reference to a block in the block diagram model;

generate a code generation report from the generated source code, the generating of the code generation report parsing the at least one comment in the

generated source code to identify the block path in the at least one comment and converting the generated source code into the code generation report by and replacing the at least one comment with at least one hypertext link that refers to an ~~corresponding~~ element of the block diagram model corresponding to the section of the source model language identified by the block path, the hypertext link providing a hyperlink from the code generation report to the ~~source model language representing element of~~ the block diagram model; and display the code generation report to a user.

24. (Previously presented) The system of claim 23 wherein the processor and the memory are incorporated into a personal computer.

25. (Previously presented) The system of claim 23 wherein the processor and the memory are incorporated into a network server capable of Internet communication.

26. (Previously presented) The system of claim 23 wherein the processor and the memory are incorporated into a single board computer.

27. (Currently Amended) A method for generating a document having information about source code associated with a graphical model and providing a hyperlink referencing an element of the graphical model in the document, the method comprising the steps of:

providing source code identifying an element of the graphical model, wherein the graphical model is a simulatable graphical model represented in source model language, the source code including at least one comment listing including a block path that identifies a section of the source model language that corresponds to a reference to a block in the graphical model;

generating a document from the source code, the generating of the document parsing the at least one comment in the generated source code to identify the block path in the at least one comment and converting the generated source code into the document by and replacing the at least one comment with at least one hypertext link that refers to an ~~corresponding~~ element of the graphical model corresponding to the section of the source model language identified by the block path, the at least one hypertext link providing a hyperlink from the document to the ~~source~~

~~model language representing element of~~ the graphical model; and
displaying the document to a user.

28. (Previously Presented) The method of claim 27 further comprising:
selecting the hyperlink to display or identify the referenced element in the graphical
model.

29. (Previously Presented) The method of claim 27 further comprising:
providing the hyperlink at a location in the document having information about a portion
of source code identifying the element of the graphical model.

30-35. (Canceled)